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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,945	10/12/2004	Brendon Lilly	120496	8467
25944	7590	08/23/2006	EXAMINER	
OLIFF & BERRIDGE, PLC			DESTA, ELIAS	
P.O. BOX 19928			ART UNIT	PAPER NUMBER
ALEXANDRIA, VA 22320			2857	

DATE MAILED: 08/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/501,945

Applicant(s)

LILLY, BRENDON

Examiner

Elias Desta

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☒ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 July 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## Detailed Action

### Response to Applicant's Pre-appeal Review

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is accepted and, therefore, the finality of that action is withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of 35 U.S.C. 101, and the art rejection as it maintained in the last office action.

### Drawing

2. The drawing is objected to because of the following minor informalities: the data presented in some of the figures has very poor contrast. Applicant is required to submit a better print for understanding the disclosed invention.

### Claim rejection – 35 U.S.C. 101

3. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

4. Claims 1-25 are directed to non-statutory subject matter. In reference to claims 1 and 16: the output from the system that includes calculating a performance indicator for a machine operator from performance indicator distribution data is not useful, tangible and concrete.

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (Brenner v. Manson, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); In re Ziegler, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)).

A claim is limited to a practical application when the method, as claimed, produces a concrete, tangible and useful result; i.e., the method recites a step or act of producing something that is concrete, tangible and useful. Referring to the "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" in determining whether the claim is for a "practical application," the focus is not on whether the steps taken to achieve a particular result are useful, tangible and concrete, but rather that the final result achieved by the claimed invention is "useful, tangible and concrete."

The step of calculating a performance indicator data for a machine operator from performance indicator distribution data does not constitute a new or improved output that is considered useful, concrete and tangible. However, the outcome is useful and has a potential to do something concrete and tangible if it is carried out by further process, such as carrying out some measurable quantity that can be

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further used to improve some performance parameter and conveyed to the outside world in useful, concrete and tangible manner. However, in the instant case, the absence of a useful, concrete and tangible result makes the claimed invention to be non-statutory.

### Claim rejection - 35 U.S.C 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-5, 8-11, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remboski et al. (U.S. PAP 2002/0116156, hereon Remboski) in view of Engstrom et al. (U.S. PAP 2005/0159851, hereon Engstrom).

In reference to claims 1, 9 and 10: Remboski teaches a method for monitoring the performance of a machine (automobile) operator (see Remboski, paragraph 22).

The method includes the steps of:

- Measuring at least one machine parameter during the operation of the machine by the operator (see Remboski, paragraph 62);
- Measuring at least one machine parameter (see Remboski, Fig. 4, parts 402-408); and

- Calculating at least one performance indicator for at least one machine for the machine operator from the machine parameter (see Remboski, Fig. 4, step 410).

However, Remboski does not specify a performance indicator distribution comprising a range of values being used to calculate a performance indicator.

Engstrom teaches a method of monitoring the operation of a machine that uses performance indicator distribution including a range of values to calculate overall performance (see Engstrom, Fig. 5).

It would have been obvious to one having ordinary skill in the art, at the time of the invention, to modify Remboski, so that a performance indicator distribution is used, as taught by Engstrom, so as to obtain more extensive data information for improved evaluation purposes.

With regard to claims 2 and 3: Remboski further teaches providing feedback to the operator by displaying the performance indicator in real time (see Remboski, Fig. 1, part 114 and paragraph 37) and once the machine has completed an operation (see Remboski, paragraph 83).

With regard to claims 4 and 8: Remboski further teaches that a machine parameter being a dependent machine parameter (see Remboski, Fig. 1, parts 112-118).

With regard to claim 5: Remboski further teaches that machine parameters being sole parameters (see Remboski, paragraph 62).

With regard to claim 11: *Remboski* further teaches that a performance indicator being generated by an algorithm (see *Remboski*, paragraph 5).

With regard to claims 14 and 15: *Remboski* further teaches that combining performance indicators to yield overall performance where the weighting of the indicator change according to the other indicators (see *Remboski*, paragraph 41, the last two sentences).

7. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Remboski* and *Engstrom* in view of *Castelli et al.* (U.S. Patent 6,134,541, hereon *Castelli*).

*Remboski* and *Engstrom* teach using an algorithm to generate performance indicators but do not specify the algorithm being an LBG. *Castelli* teaches using an algorithm, such as LBG for information retrieval in multidimensional systems. Since *Remboski* and *Castelli* are both within the art of determining indicator distributions, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify *Remboski*, so that an LBG algorithm is used, as taught by *Castelli*, so as to drive the benefit of improved performance monitoring accuracy.

8. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over *Remboski* and *Engstrom* in view of *Greineder et al.* (U.S. Patent 6,137,909, hereon *Greineder*).

Remboski and Engstrom teach generating a performance indicator distribution, but do not specify using LRM. Greineder teaches a method for ranking a plurality of features in a set based on importance using an LRM method (see Greineder, abstract). It would have been obvious to one having ordinary skill in the art, at the time of the invention, to modify Remboski, so that an LRM method is used, as taught by Greineder, so as to drive the benefit of an efficient monitoring system that improves overall system performance.

9. Claims 16-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Remboski in view of Deb et al. (U.S. Patent 6,795,799) and Engstrom.

In reference to claims 16-25: Remboski teaches a system for monitoring the performance of at least one machine operator comprising:

- A measuring device for measuring at least one machine parameter during the operation of the machine by the operator, the machine operator related to the operation of the machine by the operator (see Remboski, paragraph 62);
- A means for measuring at least one machine parameter (see Remboski, Fig. 4, steps 402-408); and
- A module for calculating at least one performance indicator for the machine operator from the parameter (see Remboski, Fig. 4, step 410).

Remboski, however, does not specify a remote server for generating the performance indicators. Deb teaches a remote server that monitors operating



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parameters of remote machines, equipment, etc (see Deb, Abstract). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Remboski, so that the remote server monitors the machine, as taught by Deb, so as to derive the added benefit of convenience from having the ability to monitor a plurality of machines from one location.

Remboski also does not teach a performance indicator distribution comprising a range of values being used to calculate a performance indicator. Engstrom teaches a method of monitoring the operation of a machine that uses performance indicator distribution comprising a range of values to calculate overall performance (see Engstrom, Figs. 3 and 4). It would have been obvious to one of the ordinary skill in the art, at the time of the invention, to modify Remboski, so that a performance indicator distribution is used, as taught by Engstrom, so as to obtain more extensive data information for improved evaluation purposes.

With regard to claims 21-25: Remboski teaches a display providing feedback to the operator by indicating performance real-time (see Remboski, Fig. 1, part 114 and paragraph 37) and indicating performance once the operation has been completed (Remboski, paragraph 83).

### Response to Argument

10. In reference to claims 1 and 16: Unlike the Applicant's assertion, Engstrom teaches evaluating the operator (driver) and the vehicle (machine) performance (see Engstrom, page 2, paragraphs 16 and 18. These passages and the background of the

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invention (paragraph 3) show that the performance indicator is both for the operator and to some extent for the machine. In re Napier, 55 F.3d 610, 613, 34 USPQ2d 1782, 1784 (Fed. Cir. 1995) (Affirmed a 35 U.S.C. 103 rejection based in part on inherent disclosure in one of the references). See also In re Grasselli, 713 F.2d 731, 739, 218 USPQ 769, 775 (Fed. Cir. 1983). In the instant case, there are a number of citations where Engstrom provides a motivation to meet the limitation noted in claims 1 and 16.

Engstrom measures vehicle parameters such as, vehicle speed, engine revolution, and turn indicator activity etc. (see Engstrom, Fig. 4). Engstrom further teaches driver related data because the system is used to recognize large scale driving patterns that applies to many types of large time-scale driving pattern recognition tasks, such as drowsy driver detection, driver distraction detection and recognition of different driving styles (see Engstrom, paragraph 15). The range of values noted in Fig. 5 of Engstrom is actually directly measuring the operator's performance in different terrain characteristics. The normalized vehicle speed shows how an average driver behaves given the terrain and regulation of certain road conditions, such as highway, main road, suburbia or city driving.

### Conclusion

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elias Desta whose telephone number is (571)-272-2214. The examiner can normally be reached on M-Th (8:30-7:00).

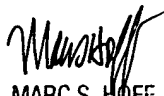
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (571)-272-2216. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Elias Desta  
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- E.d.

August 15, 2006

  
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